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CONTENTS

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MARCH 1935

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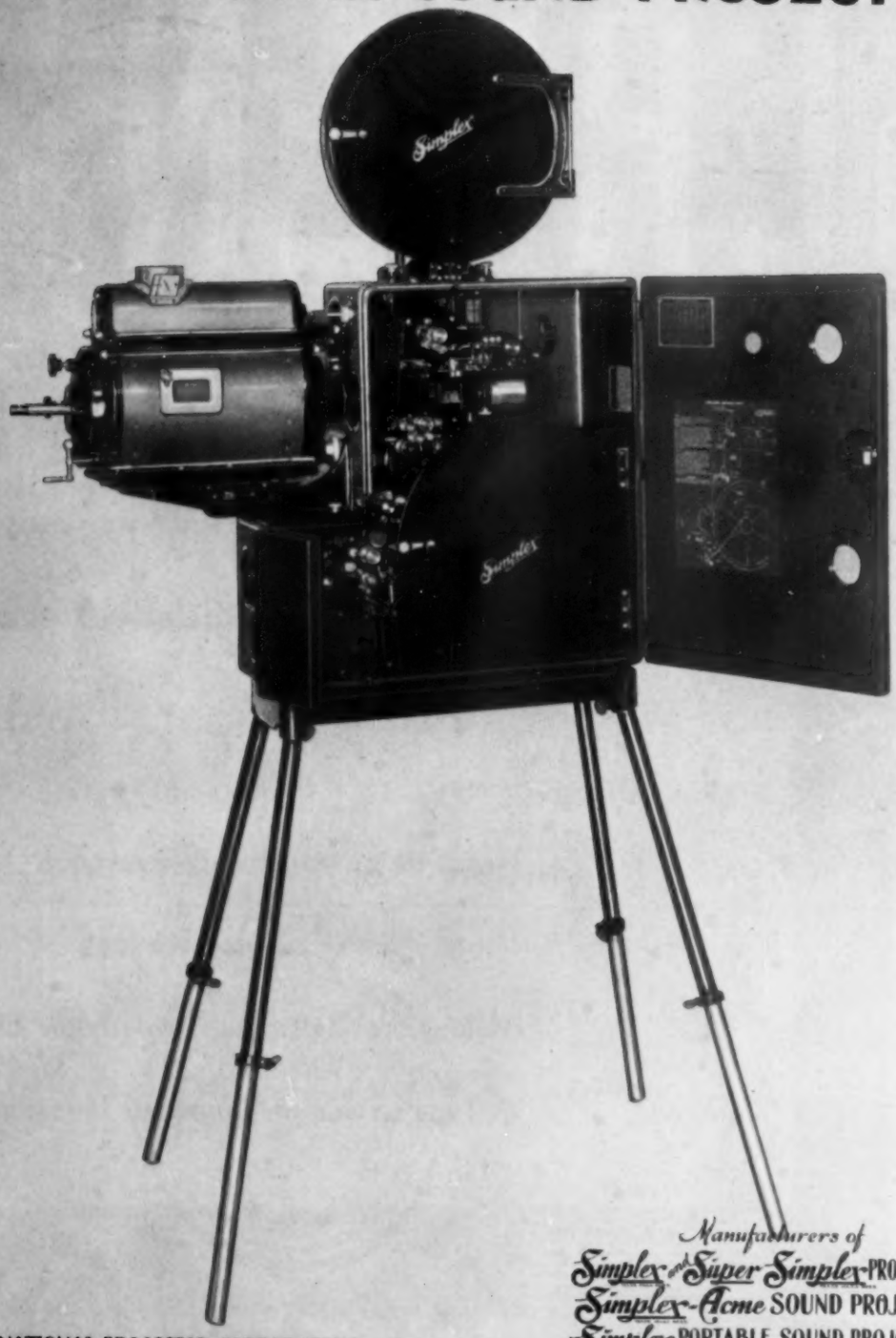

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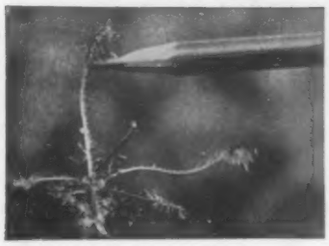

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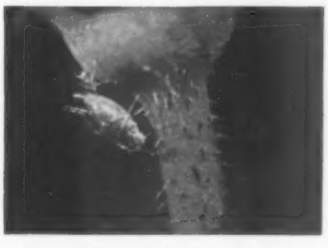

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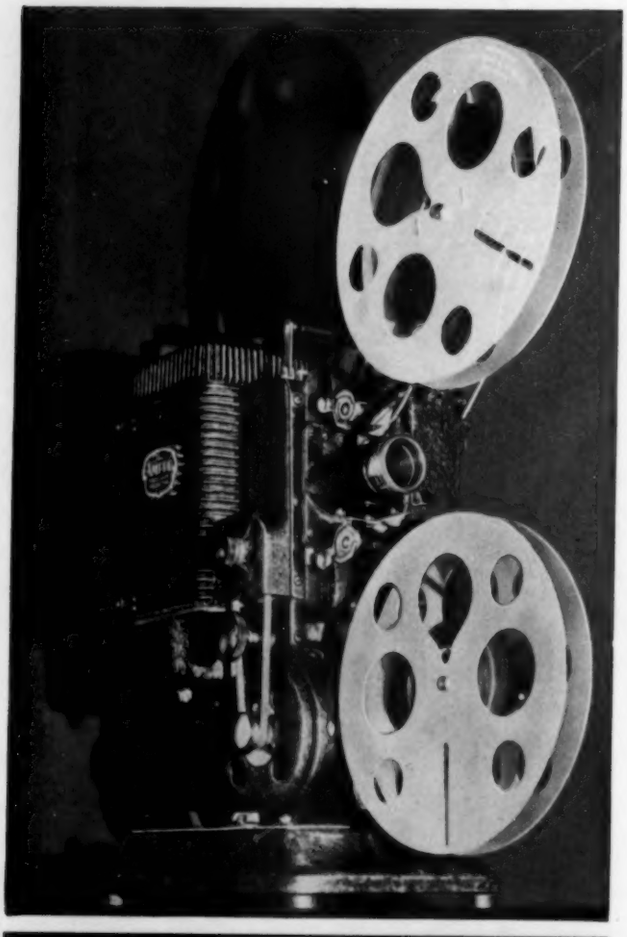

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(Signed) Wm. H. Dudley*"

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MARCH, 1935

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Mr. Victor, he found, was the real pioneer in advocating an amateur size film with a set of technical standards exclusively its own. It was he who designed and built projection apparatus (in 1914) for the then popular 28mm. reduction films, and it was the set of standards which he worked out in this development which was the first non professional criterion to be adopted by the Society of Motion Picture Engineers. Later, in 1923, Mr. Victor designed and manufactured the first commercial 16mm. camera and projector, presaging with uncanny accuracy the great developments which were to come. His researches into the fields of color and sound are bywords among cine technicians; it will be recalled that his was the first disclosure of the continuous optical reduction principle by means of which library sound films are reduced today. Future developments of equal importance are predicated clearly by the outstanding quality of Victor products of the present, concerning which Mr. Victor is justly enthusiastic.

At the termination of the "interview," Mr. Victor was tendered the heartiest felicitations of the staff of the Amateur Cinema League and MOVIE MAKERS in the name of the industry that has gained so much by his skill, courage and vision.

This interview (reproduced by permission of MOVIE MAKERS) *touches but briefly on only a very few of the numerous achievements of Alexander F. Victor.*

Drawing by Jules Gotlieb

Alexander Victor who designed the first 16mm. camera

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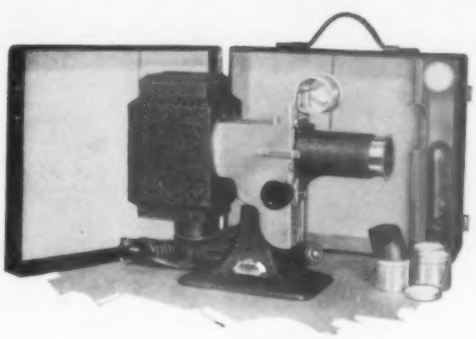

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Trends in Visual-Sensory Instruction

By F. DEAN McCLUSKY
Director Scarborough School, Scarborough, N. Y.

THIS FALL it has been my privilege to view at somewhat closer range the visual instruction activities in the New York area. There can be no question that schools in this neighborhood are moving surely toward an increased use of visual materials. The idea of visual-sensory instruction is accepted and in the one hundred or more public, private and parochial schools contacted there is a definite visual program in operation. It is surprising to find a general interest in and intelligence about visual materials whereas a few years ago there was none. One gains the impression that if we had normal school budgets we would witness a tremendous boom in visual instruction.

There can be little doubt that the Payne Fund Studies of the moral and social value of the motion picture have aroused national interest in the use of motion pictures in schools. The import of these studies while pointing toward a more desirable type of theatrical production for children impressed the public with the educative value of the film. The activities of the Motion Picture Research Council and the League of Decency have been front page news for months in our most influential newspapers. As a consequence the leaders of American education are giving closer attention to the values in visual materials. The United States Bureau has appointed a specialist in the person of Dr. Cline M. Koon who devotes his entire time to a study of the motion picture and radio in education. Last summer our government sent for the first time an official delegation to the convention of the International Cinematographic Institute in Rome. Twice during the past year a hand-picked group of educational bigwigs met in Washington to study visual instruction and to make plans for its future development. And last summer Teachers College of Columbia University offered a series of courses in this field.

One hears also talk of the Federal Government taking a hand. The establishment of a bureau or clearing house of reliable information about visual materials has been needed for several years. It has been recognized that such an institute would of necessity have to be subsidized by a foundation or some other agency which would insure its permanence, impartiality and authenticity. Perhaps this is a government job. School men would welcome the service which such an organization could furnish for many are the questions in visual-sensory education that need to be answered.

The most pressing issue in the minds of school executives is whether or not money for equipment should be invested in silent or in sound motion picture projection. Ten years ago it was the slide versus the silent film. Obviously visual-sensory instruction is of first importance but to hamper its progress by entering into controversy over the silent versus the sound picture is unwise. We need authentic research which will demonstrate the correct place for the various types of visual materials in educational technique.

The trend among schools in the New York area appears to be in favor of sound projection in the auditorium for entertainment whereas the silent 16mm. projector is being used in the classroom. Many teachers prefer to do their own talking during the class lesson. School executives are buying either projectors that can be used for both sound and silent pictures or silent projectors to which the "sound head" can be adapted. Inasmuch as there are more 16mm. films of the silent variety adaptable to classroom instruction and as the sound film and its projection apparatus costs more than the silent it would appear that the latter's use for teaching will continue to be the current practice.

School executives are asking now where this and that film may be obtained. It is the same old cry, "Where can I get it?" *1001 FILMS* has been answering this problem for many years but the question demands a more immediate type of answer than is to be found in an annual catalogue. In other words, they want quick, assured access to classroom material. All good educational material is booked up weeks in advance on individual orders. So there is a growing trend, in the direction of building up circulating libraries and circuits. Schools that can afford it are buying films for their own libraries.

The development of a critical attitude among school people toward the quality of visual aids is one of the outstanding features of the new interest in the visual-sensory field. There was a time when any picture or film would do. Just to look at pictures delighted both teachers and pupils in the past. To have a "movie" at the school was a cause for jubilation. This is no longer the case. There is an insistent demand for high quality correlated material. Otherwise, the children are only "mildly interested" and teachers begrudge the loss in time. Textbook illustrations already reflect this trend in quality reproductions. We school executives are also critical of the superfluous footage in so-called educational films. A number of principals have remarked to me this past year, "Why all the padding in educationals?" To them unnecessary titling, repetition and still scenes are a waste of valuable classroom time. The inevitable result of this insistence upon correlated quality material will be the production of shorter subjects. The slide lesson has been reduced from 40 or 50 slides to 10. In like fash-

ion the "400 ft. 16mm. reel" will become shorter perhaps reaching an average of 100 feet. The shorter units will be less expensive and can be repeated a number of times in a single class period if necessary. Seldom do children learn as much from the first showing of a good educational film as they do from a second or third. Quality in quantity at low cost will hasten the visual program in all schools. This principle applies to all types of visual-sensory materials.

Teachers are showing much uneasiness over the increased use of the motion picture and sound production apparatus in classrooms. Their concern is that robot instruction will supplant the person of the teacher. This fear has been accentuated by the increased size of classes and decreased salaries common to public schools. If the iron hand of the machine is forced into the classroom, it will be because of forces beyond the control of school administrators. Americans seem to be committed to the principle of universal education through the elementary and secondary school levels. That goal has not been reached and if it were our school buildings and equipment would be totally insufficient for the task. Even though we now have an oversupply of teachers, if all the normal children of elementary and secondary school age were to be sent to school next year, we would absorb the surplus teachers and still be hopelessly understaffed. Some contend that we are understaffed now. With enrollments mounting and budgets reduced we may be forced to mechanize large portions of instruction in any event. Rather than blindly oppose robot instruction school administrators and teachers should make a careful study of its advantages and limitations in order to be prepared for future possibilities.

Projection apparatus is being continuously improved. The demand for quality pictures is also applied to quality projection. Three years ago we welcomed with applause the 400 and 500 watt 16 mm. portable projectors. Today illumination has been stepped up to 750 and 1000 watts. The resultant is semi-daylight classroom projection and superb auditorium results. This same trend is noticeable in the new stereopticons. With the growth of the school market will come higher quality material and high quality will increase school use.

Schools like all human institutions are undergoing changes. Visual-sensory instruction may bring into modern schools that integrative force which is lacking everywhere. Is this too much to hope from a mere machine? Any relief from the flood of verbalism which seems to characterize modern life would be welcome.

Visual Aids in Science Teaching[1]

By DONALD K. LEWIS
Science Instructor Central High School, Red Wing, Minnesota

THIS DISCUSSION will consider in turn several visual and teaching devices selected because of their comparative inexpensiveness and successful stimulation of curiosity, concentration, deeper investigation and formation of serious attitudes among junior and senior high school pupils. However, before these details are introduced, it must be emphasized that the success of a visual instruction program is determined largely by the efficiency of an organization providing for pupil participation. With this idea in mind the writer experimented for a decade with different visual aid teaching set-ups and now, after careful analysis of the results, feels completely justified in offering the unit attack method.

This system, following the technique established by Dr. Henry C. Morrison,[2] involves a very critical analysis of the course study at hand in the light of pupil needs. The subject matter finally selected is then carefully divided into a series of related units and in each one a few outstanding facts are designated as the mimimum essentials which must be mastered by the pupils as they advance from one unit to the next.

The actual unit investigation process follows a set routine of six steps presented as follows:

a. *Pre-test*: An objective type test definitely covering the minimum essentials introduces the unit.

b. *Study Outline Presentation*: Definite questions and study directions are written in outline on the blackboard. After a detailed, explanatory talk by the instructor, the pupils copy the outline in their notebooks, which helps to familiarize them with the requirements of the unit.

c. *Study-Investigation*: Various teaching aids are made accessible in the classroom, e. g.—supplementary texts, encyclopediae, filed clippings, mounted pictures, magazine articles, booklets, charts, maps, graphs, blackboard diagrams, models, specimens, samples, exhibits, experimental substances and equipment, stereographs and stereoscopes, home-made and commercial stereopticon slides and lantern, and 16mm. motion picture projection equipment; field trips are also included whenever possible. Through these devices the pupils obtain necessary information and form opinions. The instructor acts as a guide, advising on materials, stimulating more careful research and demonstrating where necessary.

[1]Address given before the Visual Education Section of the Wisconsin Teachers Association, November 2, 1934.
[2]Morrison, Henry C.—The Practice of Teaching in the Secondary School. University of Chicago Press, Chicago, Illinois, 1926.

d. *Organization and Checking Information*: This is usually a paper in story or outline form wherein the pupil rechecks and summarizes his findings as called for in the study outline. Appropriate explanatory diagrams are encouraged.

e. *End Test*: This includes a repetition of the pre-test, as the first part, and additional questions covering material outside the minimum essentials as the second part. By comparing the pre-test score with the repetition score, the amount of improvement can be found; and by referring the repetition score to a worked out scale, one can get the percentage of minimum essentials mastered. The score of the additional questions composing part two will indicate something as to the additional information gained beyond the minimum essentials.

f. *Conclusion Discussion*: This is a very informal discussion wherein final conclusions are considered, view points are aired, and particular problems are examined.

The writer subscribes to this method because it provides a simple, definite plan for both teacher and pupil, and because it is built soundly upon the essential features of the scientific method of investigation. Let us now consider several commendable visual aid devices.

The School Journey

Undoubtedly, the nearest approach to thorough learning ocurs when the student is placed in actual contact with the object studied. Ideas thus obtained through first hand experience are mastered, comprehended and retained with the least effort and invariably with greatest enthusiasm; be it a study of the moon through a field glass, a visit to a flour mill, a trip thru a museum, or an actual observation of a bird feeding her young. The learner is thus taken to the learning; a situation satisfactorily accomplished through the school journey or field trip.

It is regrettable that this valuable teaching aid is at present so little used. Due to conflicts with inflexible programs, scarcity of sufficient time, failure of pupils to participate with serious attitude, inability of teachers to recognize field trip possibilities, and many other excuses, the school journey has been often relegated to the attic in favor of the textbook-recitation path of least resistance. The writer sincerely believes that the attending difficulties can be surmounted with sucessful results if careful plans are made before the trip is undertaken.

a. The instructor should become entirely familiar with local features worthy of special observation, checking each with the course of study to determine its educational value and the time when observations can be made to the best advantage.

b. In preparing for a school journey, the instructor should obtain special permits from factory superintendents or property owners; he should arrange for special guides, transportation, the sanction of the school principal, and for sufficient time for the trip.

c. The students should be thoroughly prepared for the situation to be visited, with their curiosity centered around definite problems to be solved by the observation. These items listed in a small personal notebook will aid each individual.

d. The instructor should guide the students' observations, encourage questions, and stimulate alertness on the trip, but he should not lecture.

e. As a follow-up informal discussions with student reports and diagrams help to clinch the new ideas.

Some advantages of the school journey are here quoted from Dr. C. F. Hoban:[3]

a. "Tends to blend school life with world situations.

b. "Affords opportunities to develop keenness and accuracy of observation and to experience the joy of discovery.

c. "Develops initiative and self-activity.

d. "Sets up a challenge to solve and thus stimulates constructive, creative thinking.

e. "Cultivates the habit of spending leisure time profitably."

Educational Museum

As the next best visual aid, the writer suggests the School Educational Museum, through which first hand contacts can be experienced in the classroom. A school museum should include the centralization of various scattered, objective teaching aids, as: models, specimens, samples, maps, charts, pictures, etc. with the idea of arranging them in appealing displays always readily available for instructional application.

Some questions may arise concerning the location of the museum. A vacant room, the walls of one or more class rooms, hall walls, odd corners here and there—if they are easily accessible—can generally be made to accommodate display cases. Such containers need not be elaborate in size nor design, but should be equipped with glass doors. They could well be constructed as a school shop project.

After the display case is located, the exhibit material must be prepared and classified. It would be possible to organize the exhibit according to these sections: 1. Natural History-Biology, 2. Geography-Geology, 3. Manufacturing - Industry - Chemistry, 4. Physics-Mechanics-Electrical. Each section should be entirely separate from the others and clearly designated with subdivisions as needed.

For the Natural History-Biology section the plant world will furnish fungi, wood samples, bark, pressed flowers, weeds, galls, seeds, herbs, leaves, mosses, lichens, etc. From the animal world can be obtained collections of insects showing protective resemblance, destructive tendencies, and economic significance along with collections of shells, corals, birds'

[3]Hoban, Dr. C. F.—The School Journey as a Visual Aid. P. 4. Reprinted from the Issue of September, 1927, The Educational Screen, Chicago, Illinois.

nests, types of fur, mounted birds and animals, and home-made plaster models of nature subjects. All of these are highly interesting and educational.

The Geography-Geology section can well be filled with rock and mineral specimens of local importance, supplemented by additions from distant places. Each specimen should be indexed, accurately described, classified, and its economic importance indicated. For arranging such an exhibit the "Field Book of Common Rocks and Minerals" by Loomis[4] gives a very simple, clear, and accurate outline. A rock study club could aid materially by effecting exchanges with pupils in other states. Geographical additions such as habitat groups from various countries, samples of foreign foods, clothing, spices, and so on will enliven this section.

The Manufacturing - Industry - Chemistry section should visualize how familiar commodities are produced. Carefully selected specimens and samples can be set up to show the fabrication of alloys, the production of coal and petroleum by-products, synthetic textiles manufacture, paint mixing, soap making, sugar preparation, and dozens of other well-known manufacturing processes. Each exhibit or process chart should be carefully labeled, self explanatory, and attractively located.

In the Physics-Mechanics-Electrical section, working models should be emphasized. Pupil-made replicas of historical devices, samples of simple machines, electric motors, home-made radios, storage batteries, etc. will prove extremely fascinating and interest-stimulating.

In the final organization of the exhibits too much care can not be given to the display arrangement. Neatness, balance, and eye appeal must be considered. And above all, each article, specimen, and model must be labeled with a brief worded, printed explanation placed where it can be seen. Such a collection, beyond a doubt, will become a most valued teaching aid and the growing pride of any community.[5]

Stereographs

As the next step in establishing a vigorous program of teaching aids, vivid pictorial material should be procured. Starting with the non-projection field we find the stereoscope and its stereograph picture sufficiently outstanding to warrant special consideration. This two-picture photograph is produced by the bifocal camera and, when viewed through the stereoscope's lenses, gives an unmistakable idea of depth. The foremost objects appear in the foreground of the picture with space clearly shown between them and the middle objects; while the rear objects appear in proper relationship as they would naturally be seen in the distant background. Thus, the flat unnaturalness of the average printed or projected picture is supplanted by a remarkable illusion of reality.

Let us consider other prominent advantages of this device. Due to the simple construction of the stereoscope, it has no parts likely to break, wear out, or get out of adjustment: and by the same token, it requires no skill for operation, thus enabling young children to use it safely. For the same reason it is very inexpensive when purchased, as are also the stereographs. Such were found regularly in most homes years ago; these homes might provide a number of serviceable stereoscopes. Furthermore, a large number of either one is unnecessary, since gratifying results can be obtained with only one stereoscope to a room and fifty wisely selected and utilized stereographs.

Another advantage lies in the freedom from distraction the pupil enjoys while looking at a stereograph. Since this is an individual rather than a group device it should be used only during times of quietness, all explanations and directions having been previously presented. Because of the third dimension illusion, it is natural and easy for the pupil to transpose himself imaginatively into the picture and thus for the time being actually become a part of the story lesson the stereograph is silently unfolding. At this psychological point the most effective learning occurs with the least effort on the part of both teacher and pupil. This learning process should, accordingly, go on through to completion without interruption. If the picture is clearly understood, any discussion would be irrelevant and distractive.

Perhaps the outstanding advantage which the stereograph has over other devices is the ease with which it may be correlated with practically any grade or high school subject. Specifically, it is a reference or source of learning device. Thus, it is entirely possible to fit it into the source materials of any subject, carefully choosing a very few excellent stereographs for deliberative and quiet study. Dr. Weber has briefly summarized some suggestions for the effective use of this device:

"Probably the best method of using the stereoscope is to place it with two or three stereographs on a table in the corner of the classroom or in the library, where it can be consulted as a reference, just like the dictionary, the encyclopedia, or any other source. The teacher may lay out a few correlated views for each lesson, or better, a pupil or two may be given the privilege of selecting them for the use of the class. Any member of the class who goes to the table, then, to look at the stereographs will have an inner motive for his act. In accordance with the principles of purpose and self-activity, this method of procedure creates a vicarious

---

[4]Loomis, F. B.—Field Book of Common Rocks and Minerals. G. P. Putnam's Sons, New York.
Zodac, Peter—How to Collect Minerals. Bulletin No. 2, Rock and Minerals, Peeskill, New York, 1934.

[5]Ramsey, Grace Fisher—Project Making in Elementary Science. School Service Series, 1934. Department of Education, The American Museum of Natural History, New York.
Coit, Marjorie C. ed.—Projects in Science and Nature Study. School Service Series, No. 6, 1931. Department of Education, The American Museum of Natural History, New York.

experience which effects learning in the quickest, easiest, and most satisfying manner."[6]

Photographs and Prints

It must not be inferred from the above that the photographic print or printed picture has no place among valuable teaching aids. The writer thoroughly believes that any elementary or secondary school subject can be animated, rendered more appealing with less monotony, and made more purposeful through the wise use of carefully selected prints.

"Considering the sources of valuable supplementary picture material ordinarily available, we find the following important items: encyclopediea, texts, daily newspapers, rotogravure sections, magazines, copies of famous paintings, commercial and industrial booklets, travelfolders, various railroad and steamship pamphlets, postcards, and camera snapshots. Most of these sources are readily at hand or can be obtained by mail upon writing to current magazine advertisers. Vacation travels also provide endless opportunities for every amateur photographer to make valuable additions.

"Searching care should be exercised in building up the picture collection. Each picture should make a definite contribution to the teaching process within whatever subject it is to be used. Just being 'a good picture' is not a sufficient qualification for inclusion. To be readily usable, pictures may be mounted on cards, organized into topic charts, or worked over into bound booklets. All loose pictures should be filed in boxes or envelopes according to classified topics definitely tied up with the course of study.

"In using pictures as teaching aids, it is important to realize that one effective picture thoroughly digested is worth a dozen random pictures glanced over and then tossed aside. Pupils should be trained to study a picture of ideas as they would a printed page of ideas. They should practice careful observation and concentration of attention upon the objects pictured until they know the story which the picture tells, and how it assists the development of the unit under consideration. It is natural for children to be attracted by pictures, but for best results they must be trained in the ways and means of gaining thorough comprehension."[7]

Projected Pictures

In the projection field the stereopticon and motion picture, silent or sound, are available. We can here only deal with the former, since the far-reaching possibilities of the latter provide another story. The stereopticon lantern with its commercially prepared or home-made glass slides is essentially a group device. It is used to the best advantage in class or auditorium gathering to present ideas to the largest number of individuals in the shortest amount of time. However, it is important to understand that the exposure of students to a showing of several lantern slides in a few minutes does not constitute good stereopticon technique. Teachers and pupils alike must learn to appreciate the lantern slide as a strong instructional aid rather than "showy entertainment" for which it is too often used. Best results will be achieved when only two or three slides are used at a showing. They should be selected to fit definitely into the unit at hand, and each should be projected sufficiently long to observe, investigate, analyze, question, and discuss all portrayed points and items pertinent to the subject. Pupils must be trained to study a stereopticon picture just as they are trained to appreciate printed pictures. Once this is mastered, they will welcome the short, frequent applications of this teaching aid when it is used to stimulate interest in a new unit, to contribute new and advanced information, or to provide a fascinating review device.

With respect to stereopticon slide sources, the writer first suggests reference to advertisers in professional magazines for a wide selection of commercially prepared slides. Small investments every year will soon build up a valuable library of appropriate teaching slides. These should be indexed and definitely tied up with the various unit organizations for which the slides are used. In this connection it will be found economical to select slides capable of application in two or more subjects, thus expanding the adaptability of the collection. This may be supplemented by occasional rented slide sets available through city libraries, university extension divisions, or other associations.

The second suggested source of stereopticon material involves the preparation of glass slides by pupils and teachers. Time and space prevent elaboration on the unlimited possibilities of pencil or color crayon on ground glass slides, ink writing and diagrams on smooth glass slides, and many other unique ideas. The enterprising teacher will find complete directions for carrying out this phase of a visual aid program clearly presented in several current publications.[8] Furthermore, with the average high school laboratory facilities, it is comparatively easy to print a photographic picture on a stereopticon slide. Simple directions are also readily available for this process.[9]

In closing the writer wishes to emphasize this

[6]Weber, Joseph J.—The Stereograph as a Visual Aid. P. 5. University of Texas Bulletin No. 2325. Reprinted by The Educational Screen, Chicago, Illinois.

[7]Lewis, Donald K.—The Picture in Teaching. Minnesota Journal of Education, May, 1933, pp. 320-321. Minnesota Education Association, St. Paul, Minnesota.

[8]Dent, Ellsworth C.—A Handbook of Visual Instruction. Brigham Young University, Provo, Utah. 1934.
Davison, Dr. George M.—The Stereopticon in the Public School. Leaflet. The Educational Screen, Chicago, Illinois.
How to Make Pupil-Made Lantern Slides. Leaflet. Keystone View Company, Meadville, Pennsylvania.
Lantern Slides Any Teacher Can Make. Leaflet. Turtox Service Department, General Biological Supply House, Chicago, Illinois.

[9]Lantern Slides—How to Make and Color Them. Booklet. Eastman Kodak Company, Rochester, New York.

final thought. Visual teaching devices in the light of all possible scientific justification must not be considered as the "open sesame" to instantaneous and effortless learning. Even with the best of instructional aids, there exists no rose-bordered pathway wandering lazily through the acquirement of knowledge. Visual aids certainly assist the learner to comprehend more information in shorter time: but every student must work if he would learn, and educators will do him grave injustice if anything is permitted to deflect his attitude from this philosophy.

Making the Classroom Movie More Effective

By MARION L. WHITTAKER

WITH the development of the inexpensive "fool proof" portable motion picture machine and the availability of an abundance of free and low-cost films, visual education is gradually taking its rank as a legitimate school activity by supplementing the regular course of study. As yet, however, little has been done in the way of developing a technique in the use of the motion picture machine in the classroom. It might be well to state here that this writing is based upon a number of years of experience in the use of the motion picture machine in the classroom.

It would seem that the primary purpose of visual education is to aid the child in understanding better the material presented in the course of study. Far too many teachers, however, have taken the stand, from all outward appearances at least, that it is to aid the teacher rather than to aid the pupil. Pictures have too often served as a stop-gap for an unprepared teacher. Films have too often been used which have little or no connection with the unit or topic studied and the teacher has relied upon the novelty of the situation to hold pupil interest.

Since the coming of sound and talking pictures in the theatres, the novelty of motion pictures in the classroom has worn off rapidly. It would be interesting to know to what extent this fact has affected the total of motion picture activity in American schoolrooms. If teachers are not trained in the use of such material little value can result. Before the use of the film may be made effective some definite type of technique must be set up for its selection and use.

At the present time the descriptive literature of educational films is very meagre. In describing the pictures broad general statements are used and it is a rare occurrence when the grade in which the film is to be used is suggested. This necessitates a great deal of blind guessing on the part of those ordering them. If a film on magnetism is desired the person ordering it can not discover by reading the description of it in the catalogue whether it was produced for use in the university, the high school, or the elementary school. This can be partially overcome after the second or third year if a complete record of each film used is filed in the office of the principal or superintendent. In making a record of the film several items should be included. First there should be a statement of the title of the film and the name and address of the distributing agency. Second, there should be a statement of the topics covered by the film. Third there should be a statement of the grade the picture was used in and a brief comment as to whether it was suitable for that grade or not. Other grades in which the film might be used should be stated here also. Fourth there should be a place for the teacher to make any comments which would be helpful to any one else who in the future might consider the use of the film. If this plan is religiously followed for even one year it will help materially in the selection of future pictures.

In selecting the film there are several criteria to be kept in mind. In the first place any film to be used in the classroom should be closely related to the topic or unit studied. The film should be regarded as a logical step in the development of the larger topic, and, if it is looked upon as such, the pupils will be psychologically prepared for the picture when it is presented. It is little wonder that the use of motion pictures in the schools of some communities has been viewed with disfavor by the public when the child's thinking follows the teacher's in looking upon the school movie as a means of entertainment. While there is some value in repetition the main purpose of motion pictures is to add to knowledge obtained from other sources. The film should be so selected that it will contribute to a better and broader understanding of the topic being studied.

Care must also be exercised to see that the content of the film is so well organized that it will leave the pupil with a unified impression of what has been presented. Too often a film requiring from twelve to fifteen minutes to be shown has not been centered upon any one main idea and it presents to the pupil a hodge-podge of disconnected scenes. In this type of picture too many ideas are used and it leaves the pupil in a state of bewilderment. As a typical example of this, the film entitled "Golden Health" may be cited.

(*Concluded on page 73*)

News and Notes

Conducted by JOSEPHINE HOFFMAN

Film Institute Planned

Under the able leadership of Dr. George F. Zook, former United States Commissioner of Education, the American Council on Education (744 Jackson Place, Washington, D. C.) is considering plans for the establishment of an American film institute to encourage the use of the full value of the motion picture in education. A preliminary conference of a select group of nationally known educators was held at the offices of the Council on December 4 and 5, 1934. At that time the following proposed objectives were set up:

1. To develop a national appreciation of the potential contribution of the motion picture to the cultural life of America.
2. To collect and distribute significant information concerning motion pictures in education at home and abroad.
3. To stimulate the production and use of motion pictures for educational purposes.
4. To promote the co-operation of all agencies interested in the production and use of motion pictures in education.
5. To initiate and promote research pertaining to motion pictures and allied visual and auditory aids in education.

Following the conference, representatives of more than fifty national educational and civic agencies were interviewed regarding the desirability of establishing a national film institute and to secure their suggestions as to the nature of the work that a film institute might undertake. The results of these interviews have been very encouraging, and a second conference was held February 28 and March 1 to consider additional data which had been collected and practical means to go forward with the plan for establishing the institute.

Anthropological Society Urges Film Libraries

The International Congress of Anthropological and Ethnological Sciences meeting in University College, London, last July set up a permanent Committee to secure the establishment of a central film library with corresponding libraries in all the principal countries. It is desired to have materials, hidden in unlikely places, duplicated by the film. A handbook is soon to be published which shall give instructions in five languages on the taking of anthropological films. France, Germany, Italy, England, and the United States are represented on the committee.

The National Museum of Canada has in line with this purpose, made films on the American Indian, and the National Museum of Ireland with the help of the Royal Irish Academy and Pathe Company has filmed the last man who knew how to make the hide-covered round currachs used on the River Boyne.

"It may be that in time every large museum will have a department which will deal with filmed records, and which will also have charge of the showing of films to illustrate the museum collections."—*The Museums Journal, London.*

New Educational Film Directory

The 1935 issue of *Motion Pictures of the World and Its People* has recently been released by International Educational Pictures, film clearing-house of Boston and New York. In general typography, size and arrangement of subject matter, the new handbook is similar to the 1934 edition, the first directory issued by this organization, but the 32-pages have been extended to 52 pages, attractively and generously illustrated. The enlarged current edition offers more complete film descriptions, new classifications, and an expanded index. The 2000 films it lists, represents the libraries of almost one hundred film distributors, and are classified under the general headings of All Countries, Art, Biography, Entertainment, History, Industry, Nature, Religion, Science, Sports, and Transportation, with numerous sub-headings for ready reference. Four hundred subjects are loaned free to subscribers to the service.

The price of this new catalogue is thirty-five cents.

Buffalo Museum's Loan Service Increases

Despite a drastic reduction in budget for 1934-1935, which necessitated curtailing visitors' hours at the Buffalo Museum of Science by 31%, that institution nevertheless enjoyed record-breaking figures in its loan service for the first half of the fiscal year, dating from July to December, 1934. Its attendance also showed a gain of 7% or a total of 182,569.

Lantern slides circulated from September through December in Buffalo's public schools showed an increase of 23,940, (45%) or a total of 77,075, against 53,135 for the same period during 1933. This increase was due to a delivery service inaugurated by the Board of Education in the spring of 1934. A total of 117,290 against 103,466 slides last year were loaned to all users.

The Loan Exhibit Bureau of the Buffalo Museum likewise came in for a boom. In 1933 it registered 7,003 for the September-December school period, while in 1934, it totaled 18,092, showing an increase of 11,089 (158%). This service consists in the loan of charts, pictures, objects, and manuscripts to borrowers calling in person at the Museum.

"Ten Best" Films of 1934

Some 425 newspaper critics of motion pictures voted MGM's *The Barretts of Wimpole Street* the best picture of the year in Film Daily's annual contest. The *House of Rothschild*, United Artists, was second followed, in order, by *It Happened One Night*, *One Night of Love*, both Columbia; *Little Women*, RKO; *The Thin Man*, *Viva Villa* and *Dinner at Eight*, all three Metro-Goldwyn-Mayer; *Count of Monte Cristo*, United Artists, and *Berkeley Square*, Fox.

Making the Classroom Movie More Effective

(*Concluded from page* 71)

The producers of this one reel film used scenes showing the early missionaries of California, the reclamation of waste lands, the growing of citrus fruit trees, the manufacture of orange crates, the grading of oranges, and athletic contests the participants of which owed their success to the large quantities of orange juice which they drank.

While almost all of these topics may be used legitimately in the classroom separately, there are too many ideas used for a reel requiring only twelve minutes to be shown.

The silent film should be examined to determine whether or not it contains any essential words which are beyond the undertanding of the lower pupils of the class. If many of these words are found the film should not be used; however, if there are only a few, the teacher should make note of them and explain their meaning to the pupils before the picture is shown

The motion pictures used in the school should contain little or no advertising. Although it is difficult to obtain pictures which are free from advertising, unless they are purchased or rented, the sudden introduction of "Babe Ruth" using the product of a certain manufacturing company detracts seriously from the educational value of the film. Some advertising, however, will have to be tolerated if the school is obliged to depend upon free films.

The material presented should be accurate and should be selected from the standpoint of child interest. It is common knowledge to educators that children learn more readily and retain what they have learned longer when motion pictures are used. Because wrong ideas are gained as easily as right ones it is of utmost importance that the material presented be one hundred per cent accurate. That many present day films do not measure up to these standards is probably due to the fact that they are produced by commercial firms without the advice of competent educators.

After the film has been selected the teacher should run it through and thoroughly prepare herself before showing it to her class. A lesson in which visual material is used needs as much if not more preparation on the part of the teacher than the traditional lesson. Pupil observation needs a most careful direction when motion pictures are used, otherwise pupils may come away from the picture with a distorted idea of the significant facts presented. In preparing to show the picture the teacher should outline the main points in order that she may point out the relationship between them and the topic studied. In doing this she will also determine the essential facts to be emphasized when the picture is shown to the class.

A wise teacher once said, "My pupils get out of a picture just what I want them to get out of it". Before the actual showing of the picture it is well to go over the main points with the class emphasizing the important things to look for. While the film is being shown one effective method of emphasizing the main points is by reversing the machine and repeating certain parts of the picture.

A comprehensive test should be given and scored in class immediately following the picture in order that the teacher may correct any wrong impressions in the minds of the pupils. After the test has been scored it is well to have a class discussion based upon the test and the outstanding facts or principles brought out in the picture.

The physical equipment should be in such condition as to make for ease in handling. If it becomes burdensome for the teacher to get the room ready it is not likely that her pupils will be privileged to see many pictures. From the standpoint of time economy the equipment should be arranged in such order that it can readily be put in service. When not in use the movie machine should be kept in a central office with one person responsible for its repair. This same person should also be responsible for locating the machine when it is in use. The shades should be checked each time they are used and the ones needing repair reported to the proper authority.

Summary. The primary purpose of visual education in the elementary school is to aid the child in understanding better the material presented in the course of study. Teachers should be trained in the use of visual materials. A complete record of each film used should be filed for future reference. Films used in the classroom should be closely related to the topic studied and the content of the film should be well organized. The pictures used in the school should contain little, preferably no advertising. The material presented should be accurate and should be worded so that the slower pupils of the class may read understandingly. The teacher must prepare herself thoroughly before showing any picture to her class.

Department of Visual Instruction Notes

Conducted by ELLSWORTH C. DENT, Secretary

Winter Meeting Small But Fruitful

The winter meeting of the Department was held at the Chelsea Hoetl, Atlantic City, on Monday, Tuesday and Wednesday, February 25-27. It was found that the majority of the delegates to the meeting of the Department of superintendence were too busy with the activities of that group to spend much time with the visual instruction enthusiasts. Those who did come to the meeting displayed a genuine interest in the problems and activities of the Department and participated in the discussions.

The general theme of the meeting was "Vitalizing Instruction through the use of Visual-Sensory Aids." The series of meetings started with the afternoon session on Monday and jumped right into a discussion of the place and values of visual-sensory aids as determined by experience and research. This session was developed around a panel discussion, under the leadership of V. C. Arnspiger, of New York City. It was found that the time was much too limited, so a continuance of the panel was voted at an informal breakfast on Tuesday morning.

The Monday afternoon panel discussion was followed by a demonstration of the classroom use of pictures in the development of an instructional unit. This demonstration was presented most ably by Miss Zoe A. Thralls, Assistant Professor of Geography, University of Pittsburgh. The time for discussion was much too limited and many expressed a desire to have Miss Thralls appear on an early future program.

The problems of administering the visual instruction program in a Junior High School were raised, discussed, and some solutions offered by P. D. Pointer, Principal of the Central Junior High School of South Bend, Indiana. It is unfortunate that Mr. Pointer's discussion could not have been presented before a meeting of junior high school principals and teachers, as each would have gained much from it.

Many of those who think of the application of visual-sensory aids to instruction consider the radio to be closely related to, if not an integral part of the large group of mechanical means of broadening the scope of classroom contacts. The discussion, "Taking Advantage of Radio Possibilities," as presented by Tracy F. Tyler, Secretary and Research Director of the National Committee on Education by Radio, called attention to some of the ways in which radio is being utilized by the modern school and pointed out some of the possible future developments.

The Tuesday meetings started with the breakfast continuing the panel discussion of Monday afternoon. This was followed by an open business meeting, during which various plans and possibilities of the Department of Visual Instruction received rather thorough examination. The sense of the group seemed to be divided as to whether the Department should remain a small group, interested in the major problems of research and recommendation, or should strive to popularize membership among the large numbers of teachers and school administrators who are attempting to make the most effective use of visual instruction materials available. Methods of financing the organization were discussed and later recommendations were made.

This meeting was followed by an informal luncheon. The luncheon was arranged by George W. Wright, active New Jersey visual instruction worker and supervising principal of the New Providence Public Schools. Mr. Wright introduced "Pop" Balcom,—otherwise known as Assistant Superintendent A. G. Balcom of Newark—who presented an interesting illustrated discussion of the early history of New Jersey, especially that part whch pertained to Newark and vicinity.

The afternoon meeting was a joint session with the Study-Discussion Group G. Division V, of the Department of Superintendence. The general theme of the meeting was "The Adaptation of the Newer Media of Communication to Education," and included able discussion of the sound picture, the radio and theatrical pictures, as well as consideration of the administrative problems involved.

Wednesday morning was left open for committee meetings and other details in preparation for the business meeting to be held later in the day. One of the highlights of the day was the testimonial luncheon for Alfred W. Abrams, long-time Director of Visual Instruction, State Education Department, Albany, New York. The luncheon was arranged by "Pop" Balcom, who presided. Mr. Abrams was unable to be present, due to the magnetic attraction of sunny southern skies, under which he is enjoying a well-earned rest. He did send a pleasant and thought-provoking message to the group assembled, in which he urged the continued application of high standards to visual instruction materials and devices of all kinds.

The principal speaker at the luncheon was Assistant Commissioner J. Cayce Morrison, of the State Education Department, Albany, New York. Dr. Morrison mentioned many of the finer qualities of Mr. Abrams, commending him highly upon the standards he had applied to visual instruction activities under his direction. At the close of Dr. Morrison's discussion, brief testimonials of Mr. Abrams' prominent and effective place in the field of visual instruction were given by Dudley of Chicago, Peters of Kansas City, Miss Hochheimer of New York, Hollinger of Pittsburgh,

(*Continued on page 87*)

Among the Magazines and Books

Conducted by MARION F. LANPHIER

Education (January, '35) In this issue, which is devoted entirely to the teaching of Geography, we note four articles which are particularly cognizant of the contribution of pictures to effective technique.

"Geography and International Relations," by Daniel A. Prescott, Rutgers University. The study of geography is recommended for helping man to get an understanding of his social lag, and also to enable him to discover the better way ahead. "Must not geography teachers examine with their classes the values that are inherent in home life and seek to understand how these are realized under varying conditions? Must they not make more graphic the nature of human experience in the different quarters of the globe so that a basis of common understanding and sympathy may be found for the world? If the study involves things near at hand this implies visits and activity, if it involves distant lands it means many stereoscopic and motion pictures, many good realistic stories, the exchange of materials and products with the schools of these lands and correspondence between the children of these and other lands.

"Geography in the Reading Museum," by Josephine Moyer. The article is a thrilling account of the museum maintained in a 30-acre park by the Reading, Penna., Board of Education. Lantern slides, motion pictures and lectures supplement the curricula of the schools. A children's laboratory has glass-covered closets, along the four walls, enclosing commercial products of the world. A small auditorium is adjacent where slides and motion pictures are seen "to continue the building of new concepts and to reduce the possibility of error. Here the labor involved in producing the output is realized, and the topographical and climatic conditions necessary. Thus a knowledge of geographical principles is inculcated, and an appreciation of the region's contribution to world welfare."

"Geography Teaching in English," by Ernest Young. (Professor Young has been a visiting lecturer at the University of Chicago and at the University of Southern California.) Geography should include the study of local, national, and world citizenship. "To help us make the picture of the region alive we should introduce the children to the people who have been there. Not only have we in order to make a region live, to listen to the voices of the explorers, we have also to look at it with the eye of the artist and the photographer. This means the constant use of well-chosen pictures, but they must be really geographical pictures and not merely of railway stations or post offices."

"Interpreting the Schools with Visual Aids," by W. W. Whittinghill and John S. Thomas. Motion pictures are helping to give an interpretation of social organization by bringing real things and real people into the classroom. Pictures of wild life and resources, of functions of various departments of government, of business and industry bring interpretation of social life to the school-room. The schools are interpreted through exhibits that show parents the continuity of the child's work. Motion pictures of the school's functioning interpret present procedures to both pupils and parents. Slides also may be made of school activities and used in public meetings. Newspaper pictures, and sequences of educational development arranged in a museum are ready means for quick assimilation of knowledge of the school status by the public.

School and Society (February, '35) "The Development and Use of Motion Pictures in New York City," by Paul B. Mann, Head of Biology Dept., Evander Childs High School.

A glance at progressive cities in the United States shows that the giant, pronounced asleep ten years ago, has awakened. "Visual Education is this sleeping giant. With his full force awakening will come a new era in education that will be more far-reaching in its effect on civilization than is now conceivable."—Mahaffey. An interesting history of the evolution of visual instruction in New York City schools is formulated in the article. There are now ten complete courses of films coordinated with the regular school instruction. Over $30,000 is appropriated to the Visual Instruction Department annually. In 1933, the American Museum of Natural History loaned films for 56,000 showings to over 9 millions of young people. Emphasis is placed upon a careful teaching technique. A review of outstanding experiments, attesting the proved worth of visual materials is given. "All this means that the motion picture is bound to be recognized, not alone by progressive teachers, but by the rank and file as one of the most valuable educational contributions from modern science. Interpreted, used with skill and discernment, it can energize the adolescent mind as no other medium can."

Woman's Press (December, '34) "The New Three R's", by Jean Grigsby Paxton.

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in common with a play, a novel, painting, music, sculpture, or a dance, are:

(1) The story, which has in the film a more flexible and broader range than the stage story;

(2) Dialogue or lines. We have not learned to listen to splendid lines, or perhaps they have not been produced and uttered by a musical and interpretative voice;

(3) Setting. Words can do little in making us see and feel beauty. Yet, the movie may fail in using artistic restraint in the realm of photography, and is being artificial;

(4) Character Portrayal. "The screen so far has developed fewer really fine actors than the stage—" The inner life of imagination and ideals is slightly revealed on the screen;

(4) Purpose. "The acid test (of a picture) is, what is the meaning of the whole? . . If cinematography is to attain its full stature of an art, or even a respectable place among the arts, it will have to excel in their techniques and have meaning and value in the daily life of people far above that of killing time for passive spectators. When men and women with something to say about the social scene and the meaning of life know the medium and express themselves in the cinema as sincerely as they do in novels, plays and poems, the motion picture in all probability will effect the mass of people even more profoundly than other forms of art have done."

London Studio (January, '35) "Richard Teschner's Figuren Theater," by Richard Teschner.

The author holds that marionettes have an artistic field, wholly unique, aside from the lilliputian one. The spectator contributes, in addition to his admission fee, what is of much more value, the activity of imagination. The producer does not leave him entirely passive. In composing plots, the attention is centered on the gestures and artistic grouping. In the inverse order from that of the standard stage, the figures are invented and then they act out their parts. Many of Mr. Teschner's characters have been in a paper embryonic state for a decade before assuming a third dimension on the stage. Sometimes, it takes years for these tiny actors to learn their parts and to acquire histrionic ability. Their creator had to make all his developments with his own hands and purse. The plan of working the marionettes from below led him to alter his whole system. There is no imitation of, or competition with, the real stage or the cinema, but a complete contrast to them prevails.

Mr. Teschner says as to the future, "I shall continue to endeavor to produce serious and artistically valuable effects with my jointed puppets to a small public capable of appreciating them. I shall bring out their special charm and puppet qualities."

Dartmouth College Newsreels

Seven years ago President Hopkins of Dartmouth had the idea of producing in Hanover films showing current activities with the purpose of sending these to alumni clubs, schools, and other groups. The alumni clubs were so enthusiastic that it was decided to produce sets of movies two or three times every year. This has been done until now the college has a rather extensive library of movies of every sort of Dartmouth activity, of prominent teachers and alumni, of famous events both athletic and non-athletic, and a variety of other things that make the collection of pictures valuable.

The usual set of movies, taken with Bell & Howell equipment, consists of two 400-foot reels. An attempt is made to include a variety of shots and subjects rather than try to follow through on any one continuity theme. For instance, the pictures which are now being shown before alumni and school groups include scenes of the Dartmouth Commencement exercises last June; the opening of College this fall; early football practice and some of the major football games; unusual shots of one of the star members of the ski team practicing skiing during the summer on pine needles; and climaxed by some spectacular ski jumping off the famous Dartmouth jump.

Although Dartmouth winter sports, in which the College is recognized for its supremacy, offer fine opportunities for movies, there are a great many other subjects which make interesting movie fare, such as laboratory instruction, scenes of the interiors and exteriors of all College buildings, pictures of famous members of the faculty, and scenes of interesting events. A further development which is particularly interesting is the production of "composite reels" under three general headings: first, a set of three reels covering the best shots made of winter sports and carnival activities and other Outing Club scenes during the past seven years; second, a set of three reels compiled similarly of shots of famous athletic events in which thrilling football games are featured; and third, an ever increasing set of composite films which record the familiar faces of the members of the faculty, some of whom have died since the pictures were made. This last set of films will be of ever increasing value historically.

The production of a 16 mm. sound picture is next on the program. It is planned to combine some of the current movies with other appropriate shots and to put out a film with a sound strip which will give a good picture of Dartmouth life together with musical and speaking sound accompaniment.

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The Film Estimates

Being the Combined Judgments of a National Committee on Current Theatrical Films
(The Film Estimates, in whole or in part, may be reprinted
only by special arrangement with The Educational Screen)
Date of mailing on weekly service is shown on each film.

After Office Hours (Clark Gable, Constance Bennett) (MGM) Lively, sophisticated, social crime-comedy, more breezy than realistic, with young, bumptious "managing editor" as hero, and snobbish, society-belle heroine as his dilettante reporter. He solves aristocratic wife-murder and wins heroine. Amusing improbability. 2-26-35
A—Good of kind Y—**Amusing** C—Not good

Baboona (The Martin Johnsons) (Fox) Africa strikingly pictured from airplane and ground, with really unique shots of animal life, landscape and natives. Faking done sparingly. Fortunately shows more Africa and less Johnson than usual. Narrator's diction well-meant but rather crude. 2-19-35
A—**Interesting** Y—**Very good** C—**Very good**

Band Plays On, The (Robert Young, Stuart Edwin) (MGM) Sound, wholesome theme of fine-spirited coach who raises four slum boys from potential criminals to football stars in college. Unfortunately weakened by confused motivation, misdirected sympathy, excess sentiment—and the boys are hardly convincing as players. 2-26-35
A—Hardly Y—Fairly good C—Fair

Best Man Wins (Jack Holt, Edmund Lowe) (Colum.) Ordinary adventure story of two divers, risking their lives for each other, now friends, now enemies over same girl, engagingly played by Florence Rice. Good photography of undersea action and diving mechanisms. Some painful scenes. 3-12-35
(A) Fair of kind (Y) Perhaps (C) Not the best

Charlie Chan in Paris (Warner Oland, Mary Brian) (Fox) Another delight for lovers of the shrewd, genial, sententious Oriental detective, his son helping him this time, as Chan tracks a dual-murderer through Paris cabarets and the famous sewers. Some novel elements over previous films in series. 2-19-35
A—Good of kind Y—**Good** C—Doubtful

Cheating Cheaters (Fay Wray, Cesar Romero) (Universal) Very ordinary crook story of two gangs trying to bluff and rob each other, with detective-heroine disguised as member of one, and hero a tool of the other. Confused and obvious, dialog banal, comedy elementary. 2-12-35
A—Poor Y—Better not C—No

David Copperfield (Practically perfect cast) (MGM) One of finest films ever made. A classic superbly screened. Outstanding for backgrounds, costumes, and character portrayal faithful to spirit and manner of original. Deserves universal attendance by young and old. A joy to those who know their Dickens best. 2-19-35
A—**Excellent** Y—**Excellent** C—**Strong but good**

Devil Dogs of the Air (Jas. Cagney, Pat O'Brien) (Warner) Engrossing film, less fiction than genuine document on training activities at Naval air base. Impressive, thrilling scenes of air maneuvers in realistic practice battle, from which cocky but chastened hero emerges with flying colors. 2-12-35
A—**Very good** Y—**Mostly good**
C—**Good but thrilling**

Enter Madame (Elissa Landi, Cary Grant) (Para.) Hilarious, noisy comedy about temperamental operatic soprano, too busy with career to be wife to her husband, almost loses him to gold-digging widow. Happy ending most convincing part. Amusing character scenes, good photography and music. 3-12-35
(A) Perhaps (Y) Fairly good (C) No interest

Gigolette (Adrienne Ames, Donald Cook) (RKO) Society heroine, down on luck, given job by cheap, good-hearted grafter in his low-grade night club, meets rich playboy. Marriage near, but misunderstanding postpones happy ending a few reels. Rather too earthy and common to amuse greatly. 3-12-35
(A) Mediocre (Y) Hardly (C) No interest

Good Fairy, The (Margaret Sullavan, Frank Morgan) (Universal) Molnar's whimsical character-comedy finely screened with choice cast and dialog, and comedy that sparkles. Charming heroine unintentionally turns heads of three men and right one finally wins. Thoroughly wholesome amusement on the whole. 2-12-35
A—**Excellent** Y—**Excellent** C—Mature

Great Hotel Murder, The (McLaglen, Lowe) (Fox) Manages to be fairly engrossing mystery holding interest and suspense, despite farcical humor by McLaglen as dumb, floundering detective and the self-assurance of Lowe, amateur sleuth, who does finally run down the killer rather cleverly. 3-12 35
(A) Fairly good (Y) Probably good (C) No interest

Helldorado (Richard Arlen, Madge Evans) (Fox) Crude young hero dominates tourist group caught in terrific rainstorm in wild mining country. They stumble upon ghost town with one mad inhabitant. False gold rush yields thrilling climax. Eerie atmosphere and suspense make rather good adventure stuff. 2-26-35
A—Amusing Y—**Thrilling** C—Fair

Hell in the Heavens (Warner Baxter) (Fox) Vivid picture of tense life of air-fighters in French aviation center during Great War, with gruelling fear torturing all alike. Mostly grim, convincing realism, slightly eased by bits of comedy, leaving little glamour about war. 2-12-35
A—Good of kind Y—**Good thriller**
C—Too strong

Iron Duke, The (George Arliss) (Gaumont-British) Lavish historical spectacle masterfully played and set. High moments from Congress of Vienna to grave changes after Waterloo. Striking portrayal of Iron Duke by Arliss, rather more duke than iron. Dignified, slow-moving but interesting and impressive. 2-12-35
A—**Very good** Y—**Very good** C—Mature

Lightning Strikes Twice (Ben Lyon, Thelma Todd) (RKO) Melodramatic mystery-farce of mistaken identities embarrassing to gay society hero and his fiancee, with three supposed murders. Anything for a laugh — slapstick antics, fake fan dancing, policemen in underground sewers, etc. 3-5-35
A—Crude Y—Not good C—No

Little Colonel, The (Shirley Temple, L. Barrymore) (Fox) Highly sentimental but charming post-Civil War story of North-and-South antagonisms. Appealing little heroine finally breaks down old Colonel's wrath at daughter's marriage to Northerner. Lovely Southern settings. Two great roles. 3-5-35
A—**Charming** Y—**Excellent** C—**Excellent**

Murder on a Honeymoon (Edna May Oliver, J. Gleason) (RKO) Lively murder-mystery-farce, with schoolteacher-detective heroine who scents, tracks, solves series of non-gruesome murders. Fun and thrill over false trails, blunderings of blatant sleuth, and Edna May's rare character work. 3-5-35
A—Good of kind Y—Good of kind
C—Too exciting

Mystery of Edwin Drood, The (Claude Rains) (Universal) Third recent Dickens picture, his unfinished murder mystery romance splendidly screened, characters and situations retaining all their strength and grim atmosphere, finely acted against authentic backgrounds. Different in mood and tone but unmistakably Dickens. 2-19-35
A—**Very good** Y—**Very good** C—Beyond them

One Hour Late (Twelvetrees, Nagel) (Para.) Office romance of clerk and dumb stenographer provides human and pleasant little comedy-drama. Stalled elevator furnishes tense climax which influences lives of four people, the hero finally winning the girl and realizing his radio ambitions. 3-5-35
A—Fair Y—Probably amusing C—No interest

One More Spring (Baxter, Gaynor) (Fox) Whimsical, human depression-story of three divergent characters, reacting differently to failure and privation, fighting poverty together with Central Park stable as refuge, winning through to Spring. Suffering deftly made wistfully amusing and stimulating. 3-5-35
A—**Pleasing** Y—**Very good** C—Beyond them

Our Daily Bread (Tom Keene, Karen Morley) (U. A.) Young couple, beaten by depression, go back to the land, enlist workers and form mutual service community. Success threatened by drought till ex-criminal sacrifices himself to make irrigation possible. Earnest propaganda more telling if better acted. 2-12-35
A—Only fair Y—Fair C—Little interest

Red Morning (Steffi Duna, Regis Toomey) (RKO) Melodramatic story about exciting adventures of Portuguese sea captain's daughter among native tribes on South Sea Island after shipwreck and desertion by crooked crew. Some naive hokum and mediocre acting, but lovely, authentic tropical scenery. 2-26-35
A—Hardly Y—Perhaps C—Too exciting

Ruggles of Red Gap (Laughton, Boland, Ruggles, Young) (Para.) Master comedy, contrasting crude West of the '90's with European tradition, finely played by notable cast with exact degree of burlesque for maximum comedy values in character and situation. Intelligent and utterly amusing. 3-5-35
A—**Excellent** Y—**Excellent** C—**Mostly amusing**

Rumba (George Raft, Carol Lombard) (Para.) Expert-dancer hero, crude but "irresistible", and socially "elite" heroine, blasee and languishing, do Havana-New York love-chase. Kept carefully risque and not offensive. Wild press-agent adds comedy and thrill. Glamorous dancing. Cf. Bolero. 3 5-35
A—Hardly Y—Unwholesome C—No

Silver Streak, The (S. Blane, C. Starrett) (RKO) Vivid picture of modern aluminum train — its invention, development, construction, trial, and record-breaking, life-saving run from Chicago to Boulder Dam—with human interest and mild romance. Acting ordinary. Healthily thrilling. 3-5-35
A—**Interesting** Y—**Excellent**
C—Good if not too strong

Strange Wives (Roger Pryor, June Clayworth) (Universal) Stupid title for uninspired screening of Wharton story of wealthy, easy-going young bachelor who succumbs to marriage and imposition from parasitic relatives of his Russian wife. Turns tables cleverly. Story wavers artificially from farce to obvious comedy. 2-19-35
A—Feeble Y—No C—No

Sweet Music (Rudy Vallee, Ann Dvorak) (Warner) Artificial concoction of much variety and little worth, showing supposed backstage life of radio, built wholly around Rudy who sings, dialogs, even tries clowning, and wrangles with heroine till she sees him as true benefactor at the end. Hash and hokum. 2-26-35
A—Futile Y—Probably good C—Hardly

Transient Lady (Gene Raymond, Henry Hull) (Universal) Barnstorming skating-trio, including the heroine, strike small town containing the lawyer-hero. Complications threaten tragedy till hero defeats all efforts of political boss at "big scene" trial. Falsity in motives and conduct, and some bad miscasting. 2-26-35
A—Mediocre Y—Harmless C—Little interest

White Cockatoo, The (Jean Muir, Ricardo Cortez) (Warner) Complicated murder-mystery melodrama, set in remote inn on French sea-coast, with many involved in plot and counter-plot over heroine's American inheritance. Solved only by some original assistance from Cockatoo. Heroine's role notably good. 2-12-35
A—Good of kind Y—Thrilling C—No

Wings in the Dark (Cary Grant, Myrna Loy) (Paramount) Airplane picture, with character interest adequate thrills, much mechanics, and quite novel idea of blind flying developed by blind hero—blind until time to marry heroine at end. Quite ordinary in plot and acting appeal. 2-19-35
A—Fair Y—Good C—Hardly

Woman in Red, The (Barbara Stanwyck) (Warner) Professional horse-woman heroine, wife of polo playing son of proud family, gets involved in murder charges when cheap, drunken blonde on yachting party lurches overboard. Court trial clears heroine. Some doings of supposed "society" hardly wholesome. 2-26-35
A—Only fair Y—Better not C—No

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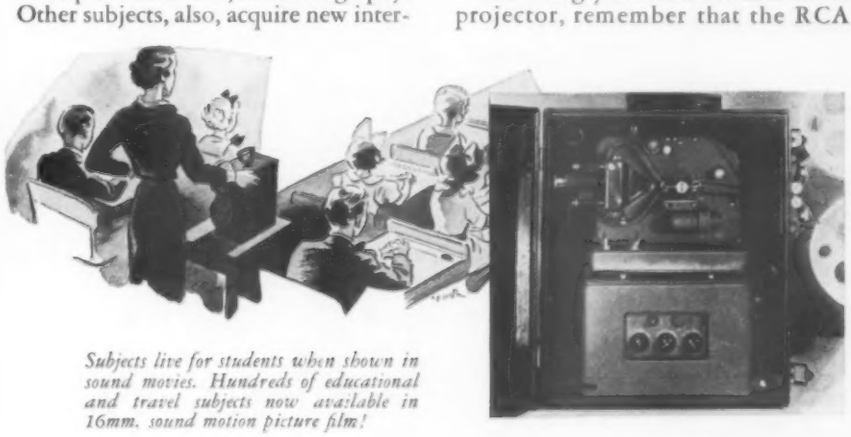

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A Type Lesson In Visualized Geography

(Index numbers refer to slides from the Visual Instruction Division, University of the State of New York, Albany, N.Y.)

Motivation—In studying the groups of states in the United States we have always been interested in knowing what most of the people do in each group. What groups of states have you studied about? Name the chief occupation of each group.

Preparation: Map Study
Where are the western states? What is the surface of these states? Today we will especially study the mountainous sections as Oregon, Washington and California. What do you think is one of the chief industries here? Why?

Blackboard Outline
Western States.
1. Locate from map.
2. Surface
   Mostly mountainous Plains east of Rockies
   Desert Regions
3. Industries: Lumbering
   a. Kind of trees
      Spruce, fir, redwood
   b. Cutting of trees
      Use of ax-saws
      Cutting branches first
      Falling in one direction
   c. Description of Lumber man
      Sturdy and healthy
      Warm clothing
4. Transportation of logs
   a. To water
      Through forest to river by sleds and flumes or chutes.
   b. To mill
      Log rafts
      Floating logs
      Chutes take them into mill
5. Shipping of lumber
   Boat
   Train
6. Paper and Pulp

Presentation: Div. X9
What do you see here? What kind of trees are they? (To what family) Describe these trees. Some of the trees found in California are hundreds of years old. (Picture of car going through trunk of tree)

162 What does this picture show? How do they keep the logs together? Where do you think the logs are being taken? What season of the year is it? Describe the lumber jack. Where do you think they are taking the logs? (Tell class about cutting of trees)

215 What does this picture show? Why are they chained? Where are they going?
Div. Ty Compare with 215. (Loose logs) Tell about jams. Which way is better? Why?

216 What do you see here?
Where do you usually find mills? Why?

Div Ty 2 What have the logs been made into? Where is this scene taken? Where is the Mill? Why? How is lumber shipped?

Div Sp Y How is lumber shipped here?
Div D Y Paper and pulp mills

Organization—Review and develop outline. (Use questions given below)

Application—(1 Class)
Problem: Why do you think one of our presidents began a drive to save our forests? How can we save them? This was called Forest Conservation. (Leads to lessons on National Parks.)

By PAULINE A. BASHKOWITZ
New York City Public Schools

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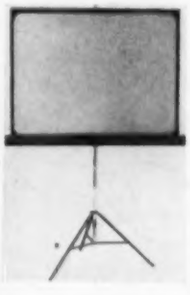

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SCREENS

Our Kindergarten Movie*

THE KINDERGARTEN movie entitled, "Dramatic Play in the Kindergarten," which was taken at Ivanhoe School last year, has aroused much interest wherever it has been shown, and questions have been asked as to its origin and the means by which it was accomplished.

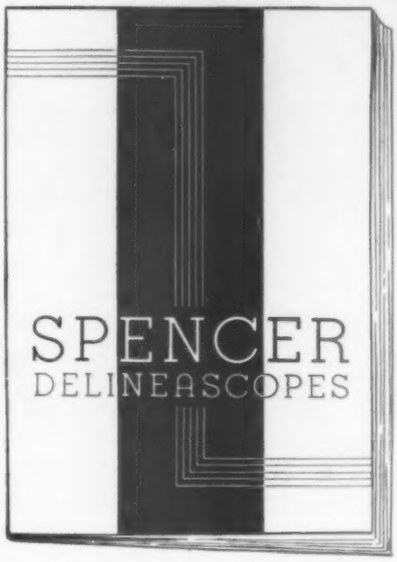
The kindergarten children who are the characters in this movie, decided to build up a Colonial house and furnish it, after seaching for pictures in such magazines as "Home and Garden," provided by the teacher, Mrs. Porter. They were shown a still-film roll showing different kinds of homes. They went for a walk in order to discover Spanish, English, bungalows, and two-story houses in the neighborhood. They found out that some were Spanish because they had tile roofs and were made of stucco, while they knew some were English because they had painted roofs, dormer windows, and showed half-timber work. The prettiest one was a big, white Colonial house, whose four large and two smaller pillars with a cupola near the door, appealed particularly to the children.

They soon began the building of the home for their baby doll and the construction of the furniture. Shutters were made of corrugated paper, painted green. Large white pillars made of rolls of cardboard, made the house look truly Colonial. And what an array of furniture! A refrigerator with real coils consisting of wooden beads; cigar boxes used for ice cubes; a sink with an "honest-to-goodness" silver-coated faucet; crib for the baby; high chair, stove with real oven and four burners; a fireplace with an opening for smoke to escape; a radio, bookcase, a baby grand piano. New words were added to their list—shutters, blinds, pillars, half-timber work, barred windows, etc.

As the furniture for the house was being made, all the cut-out pictures from magazines of furnished living rooms, bathrooms, bedrooms, and kitchens were kept in separate envelopes. In this way the children had access to them to study the different types of furniture and the kind appropriate for each room. Cut-out pictures of Colonial, Spanish and English houses were kept in separate envelopes and houses such as apartments, hotels, bungalows and cottages were kept in still another group.

Again the children were shown the same still-film of houses for the benefit of a number of invited guests from the first grade. Chairs were arranged with an aisle in the middle and one on each side, as in a real movie house. Mrs. Porter was the cameraman. Mrs. Thornquist and the children were the audience. Elaine and Lawrence were voted upon to tell about the pictures when shown. This proved to be a splendid review for the children with a real purpose to share their joy and information with others, besides providing a real situation for oral expression for those

*Reprinted from the Los Angeles School Journal, November 19, 1934.



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1813 Orchard Street CHICAGO

who told about the film. This show was a real life experience. Children invited their guests, received them, saw to it that they were seated comfortably, explained the picture to them, then bade them good-bye.

While the building of the home was in process and after it was completed, Mrs. Porter chose different children daily who wanted to be father, mother, brother and sister and play in the house. The house was dusted from top to bottom daily; groceries ordered over the telephone; baby (the doll) bathed, fed, and put to bed according to schedule, for this was a modern family; clothes washed and ironed; luncheon prepared for father (not so modern); milk was delivered and placed on the doorstep; the mail man delivered the letters; father was seen spending his time reading the paper or eating or watering the flowers; the maid washed and hung out the clothes. The whole family got together at meal time (strictly modern).

This pure, spontaneous play went on from day to day. It was so natural and spontaneous that Mrs. Porter and I decided to try our hand at recording what they were doing in the form of a movie. Parts were chosen by the children and try-outs were held, while the children selected the characters. When the cost of the movie became a stumbling block, one of the school's good patrons came to the rescue, and asked a Japanese expert cameraman to take the movie, while the cost would be only for materials.

The motion picture as finally produced proved to be a small classic. The fathers and mothers of the young actors and actresses were invited to the preview. Although it was held at an unheard-of-hour, ten o'clock in the morning, we had a full house of fathers as well as mothers, and appreciation was expressed on all sides.

If you see the motion picture described above, you will also see the results of a short study of the seashore, as summer was near and children were experiencing trips to the beach. A yacht was built. You will see it near the pier, in the movie, with children on the pier waving good-bye to them. Live stock was no less an entrancing addition to the action. Two ducks, "Quack and Wack," which were reared from babyhood, are playing along the shore.

This movie is precious to us because it shows little children *living* in a spontaneous, natural, happy manner. It is a film of an entire unit which developed as it should—children leading, teacher guiding. As the needs arose, plans were made, evaluated and carried out to the satisfaction of the children. Trips and visual aids were used to clarify ideas; frequent purposeful reviews were given when needed.

Rehearsals were not used. No two performances were ever the same. The performance was truly spontaneous play, so that the cameraman was not obliged to take the picture over again, as far as the children's acting was concerned.

By MARIE HOYT THORNQUIST
Principal, Clifford Street School, Los Angeles, Cal.

LONDON OF TODAY *comes to the classroom*

. . . Announcing a new Eastman Classroom Film . . . fifth in an important series of geography films on European subjects.

Curbstone shops in Berwick Street

LONDON is a significant topic. This film gives it an interesting and adequate treatment.

Along with views of famous landmarks it shows London as it actually goes about its daily business. The life of artisan and business man. Routine of the financial district. Conduct of urban trade—from the Covent Garden markets, Berwick Street, and Billingsgate to famous shops in Oxford and Bond Streets. The great parks as noon-hour havens for workers in a thousand callings.

Manifold activities drive home the city's importance. Emphasis is placed on the trade to which London owes its origin and present existence . . . maritime shipping that offers an index to world commerce . . . communications and other factors that help London to function as the business, educational, and cultural center of an empire.

St. Paul's—the masterpiece of Sir Christopher Wren

By escalator from the "underground"

Picturing London as it lives, the film readily performs the teaching miracle of vitally connecting the pupil with the British metropolis. Contrasting human strata within the city, it also points out similarities and differences in the respective lives of the Londoner and his youthful observer. Replete with specific information, it also draws a vivid, authentic, up-to-date background before which young minds can logically place the endless happenings which they associate with this world city.

Like other full-reel (400-foot 16-millimeter) Eastman Classroom Films, *London* is priced at $24, including transportation. It is not offered on the rental plan. All prints are made on film of the safety type.

Check your film library with this new list

LONDON is the fifth of an important series of Eastman geography releases on European subjects. Others now ready are *Denmark, Finland, Hungary,* and *Sweden.* More than 200 additional Eastman Classroom Films are also available on topics of Geography, Science, Health, History, Agriculture, Applied Art, English, and Nature Study. All are briefly outlined in the latest *Descriptive List of Eastman Classroom Films.* Send for a copy of this list and check your film library with it. Undoubtedly it will indicate many valuable additions to your present visual program.

In writing, ask to be placed on the mailing list for *The Classroom Film*—the new, free Eastman publication that provides an opportunity for an interchange of ideas among all those engaged in visual education. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

EASTMAN *Classroom Films*

Among the Producers

Where the commercial firms—whose activities have an important bearing on progress in the visual field—are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necessary space limitations, such material as seems to have most informational and news value to our readers.

Do Educators Want Shorter Reels?

H. A. DeVry, that pioneer in visual education, believes they do. Years ago when teachers and producers were discussing, pro and con, in conference after conference, the possibility of a suitable supply of true educational films, he risked a small fortune in producing the DeVry School Films. They formed a library of 86 reels,—made by actual educators for the use of educators in the class room. That library was the answer to many a teacher's prayer.

H. A. DeVry

Many serious class room instructors have asked for shorter units which would enable them to screen just the topic before the class that day—without having to run hundreds of feet of related matter not under discussion at the moment. They said also that such short topic reels could be filed easily in a cabinet and used in a cross reference system, somewhat after the manner of slides, without waste of time or film.

Mr. DeVry has accepted the challenge, in his characteristic fashion, and is now producing a new type of educational film library—a classified collection of illustrations, about 100 feet in length—wound on little reels, and all kept in order in a substantial metal cabinet, taking but little space in the class room, and always accessible as needed each day.

The reels will be exhibited and explained at The DeVry Summer School of Visual Education, which will be held the week of June 24, at the Francis W. Parker School, Chicago.

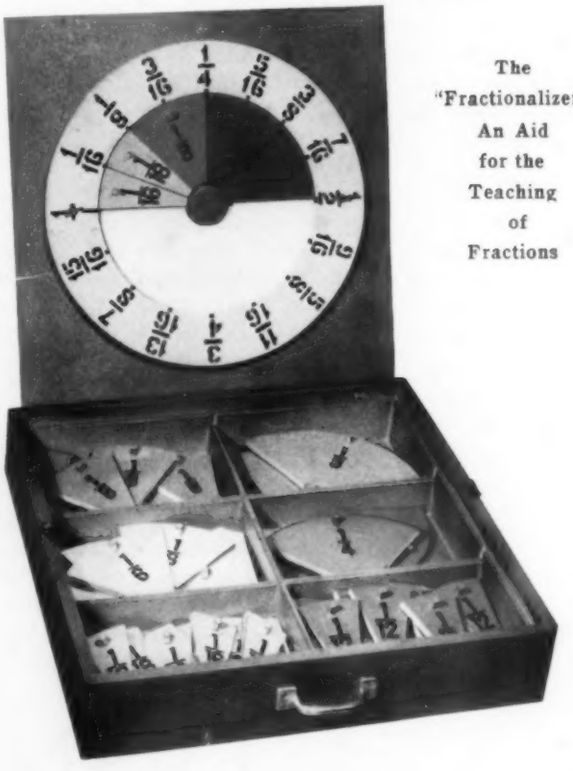
Rapid Winder for Leica

The Leica camera has always been noted for its speed in making successive exposures. The manufacturers, E. Leitz, Inc., New York City, announces an interesting device which permits even greater speed when making a series of photographs in rapid succession. The new device is known as the Rapid Winder, and consists of a polished metal cap which fits over the winding knob of the Leica. By means of a thin, flexible steel cable which terminates at a metal ring which is slipped over the finger, the shutter and film are adjusted for the next exposure by pulling on the ring. This action rotates the winding knob of the camera. When completely wound, the steel cable is permitted to slide back into the cap where, by a spring action, it coils, ready for the next exposure. In short, exposures can be made with the Leica and this new Rapid Winder as quickly as the finger can pull the ring.

The possibilities of the Rapid Winder are unlimited. News, sport, candid, and aerial photographers will be especially benefited by it. As it is attached and detached to the Leica camera with ease, it can be left on the camera, or, if the owner desires, can be attached and used only on certain occasions where it is particularly indicated by the work at hand.

Fractions in White, Red, Blue, and Yellow

In the lower grades fractions are difficult to teach. Having learned that 4 has a greater value than 2, it is not unnatural that young folk feel confused, when, in fractions, they are told that ¼ is smaller



The "Fractionalizer" An Aid for the Teaching of Fractions

than ½. Cutting an apple in half and then in quarters has helped, and the many other devices used by resourceful teachers everywhere have all, no doubt, made teaching easier and for many have cleared up some of the confusion.

Now a clever inventor has developed what he calls a Fractionalizer, using colored pieces of three-ply wood, accurately cut. Five colors are used. There is an outer disc, one side of which is marked off in 1/6, ⅛, ¼ and ½; the other side, 1/12, 1/16, and ⅓. Cut to fit into this outer disc are the brightly colored segments, corresponding to the markings on the outer circle. For instance, the students or the teacher slip in two ½ segments, and there is an instant visualization of the fact that two ½'s make a whole. Remove one of the ½ pieces, and slip in two ¼'s, and the slowest student sees that it takes two ¼'s to make a half. And so on with the other fractions covered. The learning of addition and subtraction of simple fractions is helped greatly by this visualization. Fractions aren't so hard after all!

Apart from the bright attractive colors used for the segments, it is noted that the three-ply wood used will prevent any of the parts from warping. The fifty-two fractional segments come in a well-finished, partitioned box, the lid of which lifts off, and bolted on to it is the outer circle or disc into which the parts fit. It is a compact outfit, easily carried from room to room.

This device is distributed by The Stanley Bowmar Company, New York City, special representatives for Denoyer-Geppert Company.

Department of Visual Instruction

(*Concluded from page 74*)

and others who have known him well, with highly commendatory closing remarks by Mr. Balcom.

The principal discussion of the afternoon meeting on Wednesday was presented by Clarence S. Dyke, Department of English, Atlantic City Public Schools. The subject, "The Use of Visual and Aural Aids in the Teaching of Literature in the High School," was developed to focus attention upon those types of aids which may be used to encourage a more active interest in the study of literature.

The business meeting followed. Attention was given to plans for the summer meeting, to be held concurrently with the meeting of the National Education Association in Denver, Colorado. Monday and Tuesday, July 1 and 2, were selected as the days for the visual instruction meetings, leaving other days open for visually instructing the visual instructionists among the mountains, lakes and streams of Colorado. The financial problems of the Department were discussed and recommendations made for temporary and permanent solution. A committee was appointed to investigate various possibilities and report at the summer meeting.

A New Keystone Geography Unit

Unit No. 15 — *Life in the Middle Atlantic States*—has just been released.

This makes fifteen Keystone Geography Units now ready for delivery on orders.

Units Nos. 1 to 9 inclusive cover outstanding types of adjustment to living conditions throughout the world.

Units Nos. 10 to 15 inclusive cover ways of living in important regions of the United States.

Each unit includes a *Teachers Manual* prepared by the author, Zoe A. Thralls, of the School of Education, University of Pittsburgh.

All units are available in lantern slides — plain or colored — standard stereographs, or the new junior-size stereographs.

Any unit or units will be sent to responsible Directors of Visual Instruction on thirty days' approval.

Keystone View Company

MEADVILLE, PENNA.

Here They Are

A Trade Directory for the Visual Field

FILMS

Araneff Film Associates (3, 6)
1345 Argyle St., Essanay Studios, Chicago

Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City

Eastin Feature Films (4)
(Rental Library) Galesburg, Ill.

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Eastman Kodak Co. (1, 4)
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 85)

Edited Pictures System, Inc. (1, 4)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 6)
250 W. 57th St., New York City
(See advertisement on page 61)

Guy D. Haselton's TRAVELETTES
7901 Santa Monica Blvd., Hollywood, Cal. (1, 4)

Ideal Pictures Corp. (3, 6)
30 E. Eighth St., Chicago, Ill.

Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City

International Educational Pictures, Inc.
40 Mt. Vernon St., Boston, Mass.
(See advertisement on page 77)

Harry Mendelwager (6)
317 W. 50th St., New York City
(See advertisement on page 82)

Modern Woodman of America (3, 4)
Rock Island, Ill.

Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.

Ray Bell Films, Inc. (3, 6)
2269 Ford Road., St. Paul, Minn.

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Corp. (3)
Rockefeller Center, New York City
(See advertisement on page 81)

Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (6)
2839 N. Western Ave., Chicago.
(See advertisement on page 62)

Bell & Howell Co. (6)
1815. Larchmont Ave., Chicago, Ill.
(See advertisement on inside back cover)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 6)
(Western Electric Sound System)
250 W. 57th St., New York City
(See advertisement on page 61)

J. C. Haile & Sons (6)
215 Walnut St., Cincinnati, O.

Herman A. DeVry, Inc. (3, 6)
1111 Center St., Chicago
(See advertisement on page 81)

Holmes Projector Co. (3)
1813 Orchard St., Chicago
(See advertisement on page 84)

Ideal Pictures Corp. (3, 6)
30 E. Eighth St., Chicago, Ill.

Institutional Cinema Service, Inc. (3, 6)
130 W. 46th St., New York City

International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)

Motion Picture Camera Supply, Inc. (3, 6)
723 Seventh Ave., New York City
(See advertisement on page 83)

Motion Picture Accessories Co. (3, 6)
43-47 W. 24th St., New York City.

RCA Victor Co., Inc. (5)
Camden, New Jersey.
(See advertisement on page 79)

Regina Photo Supply Ltd. (3, 6)
1924 Rose St., Regina, Sask.

S. O. S. Corporation (3, 6)
1600 Broadway, New York City

Sunny Schick, National Brokers (3, 6)
407 W. Washington Blvd.,
Fort Wayne, Ind.
(See advertisement on page 84)

United Projector and Film Corp. (3, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 64)

Weber Machine Corp. (2, 5)
59 Rutter St., Rochester, N. Y.
(See advertisement on page 83)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da-Lite Screen Co.
2721 N. Crawford Ave., Chicago
(See advertisement on page 82)

Institutional Cinema Service, Inc.
130 W. 46th St., New York City

Mogull Bros., Inc.
1944 Boston Rd., New York, N. Y.
(See advertisement on page 80)

Motion Picture Accessories Co.
43-47 W. 24th St., New York City.

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

Conrad Slide and Projection Co.
510 Twenty-second Ave., East
Superior, Wis.

Eastman Educational Slides
Iowa City, Iowa

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
30 E. Eighth St., Chicago, Ill.

Keystone View Co.
Meadville, Pa.
(See advertisement on page 87)

Radio-Mat Slide Co., Inc.,
1819 Broadway, New York City
(See advertisement on page 77)

Scarborite Colors
Scarborough-on-Hudson, N. Y.
(See advertisement on page 77)

Society for Visual Education
327 S. LaSalle St., Chicago.
(See advertisement on page 65)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 83)

Victor Animatograph Corp.
Davenport, Iowa
(See advertisement on page 64)

Visual Sciences
Suffern, New York.
(See advertisement on page 82)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

Herman A. DeVry, Inc.
1111 Center St., Chicago
(See advertisement on page 81)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 87)

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.

E. Leitz, Inc.
60 E. 10th St., New York City

Regina Photo Supply Ltd.
1924 Rose St., Regina, Sask.

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 83)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

16 MM. TITLES

J. C. Haile & Sons
215 Walnut St., Cincinnati, O.

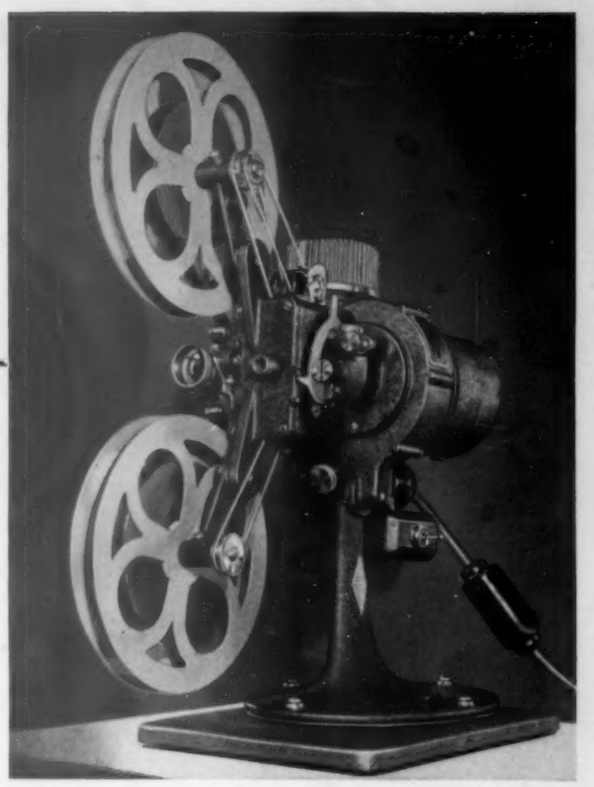
REFERENCE NUMBERS

(1) indicates firm supplies 35 mm. silent.
(2) indicates firm supplies 35 mm. sound.
(3) indicates firm supplies 35 mm. sound and silent.
(4) indicates firm supplies 16 mm. silent.
(5) indicates firm supplies 16 mm. sound-on-film.
(6) indicates firm supplies 16 mm. sound and silent.

Continuous insertions under one heading, $1.50 per issue; additional listings under other headings, 50c each.

An Economy Projector with Bell & Howell Quality

THE NEW Filmo "S" $125



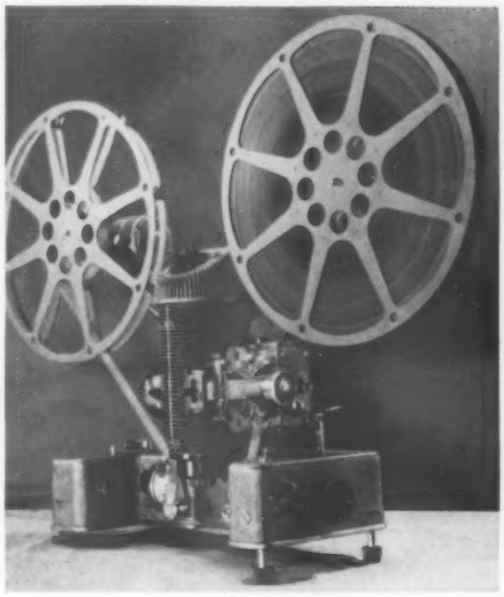
This new Filmo S Projector proves that Bell & Howell can accomplish great things in economical projection as well as in technical perfection. The Model S contains the same scientific design, the same quality materials, the same flawless workmanship that have made Filmo the world's finest 16 mm. projection machine. Bell & Howell was determined that no school need be without the high quality projection of a Filmo. So it built a Filmo Projector *any* school could afford—the Model S.

Now! 16 mm. Movies in *any* Auditorium with the Filmo Auditorium Projector—1000-watt

The new Filmo Auditorium Projector, with 1000-watt illumination, is fully capable in the largest school auditorium, showing pictures of brilliance heretofore achieved only with 35 mm. projectors. It offers a score of new refinements, including low center of gravity, 1600-foot film capacity, separate take-up motor, film cooling and humidification during projection. Price, $385. Case, $27.50. For smaller auditoriums and the classroom, there is the Filmo 129 Projector with 750-watt illumination, built on the same principles, $185, including case. The Filmo JS Projector — a fully gear-driven, 750-watt machine — is $280 with case.

Every School Can Have Sound-Movies of Filmo Quality

The Bell & Howell Filmosound Sound-movie Reproducer—engineered on the most advanced principles—is the leading 16 mm. sound-on-film machine in education and industry today. Put to the severest tests by America's largest manufacturers, it was their selection from among all others. The Filmosound is available to schools on a rental basis if desired. See your dealer or write for complete information.



BELL & HOWELL

Filmo

1817 Larchmont Ave., Chicago; New York, Hollywood, London (B. & H. Co., Ltd.) Established 1907

Study These Filmo S Projector Features

Illumination: 500-watt biplane filament lamp (750-watt at slightly higher cost). Direct illumination. Reflector and condenser instantly removable for cleaning. Lamp quickly, safely replaced while hot.

Film movement: Scientifically correct 9 to 1 ratio. No flicker.

Interchangeable lens: The standard 2-inch lens may be interchanged instantly for a lens permitting shorter throw in cramped quarters, or for one permitting long auditorium throws.

Capacity: 400 feet of 16 mm. film.

Other features: Automatic rewind, reverse, "still" projection, manual framer, helical gears, strong die-cast aluminum-alloy frame, conveniently placed controls, double-tooth shuttle.

Models: Filmo S, 500-watt line voltage lamp, $125; Filmo ST, 750-watt line voltage lamp, $140; Filmo SU, 750-watt lamp, variable resistance and voltmeter, $165. Case, $10 extra.

PROFESSIONAL RESULTS WITH AMATEUR EASE

Recipe For
SECURITY

THERE is a very simple recipe for security in showing motion pictures without an enclosing booth. When you order, specify prints made on Eastman Safety Film. Insist on them. Project them only when you have found the words *Eastman...Safety ...Kodak* in the transparent margin of each reel. Then you'll run no more risk than if you were handling so much newsprint paper. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

EASTMAN
Safety Film